



PUBLIC HEALTH BULLETIN

VOLUME 20 NUMBER 4

AUGUST 2008

In this issue: Influenza surveillance, 2007-2008 season
Selected morbidity report, January – June 2008
[Prevention and Control of Influenza ACIP](#)

Melanoma of the skin in South Dakota, 2005

By Mary Sarvis, Data Manager, South Dakota Cancer Registry

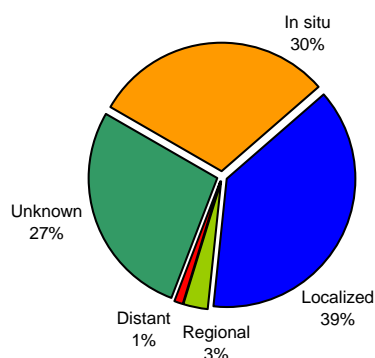
Kay Dosch, CTR, Cancer Registry Coordinator, South Dakota Cancer Registry

The South Dakota Cancer Registry has released the 2005 skin cancer data for melanoma. For 2001-2005, the average number of new melanoma cases per year was 168 and the average number of annual deaths due to melanoma was 21.

South Dakota Melanoma Incidence 2005		South Dakota Melanoma Mortality 2005	
Number of cases		Number of deaths	
Total	168	Total	16
Males	96	Males	10
Females	72	Females	6
White	167	White	16
American Indian	1	American Indian	0
Median age at diagnosis	65 yrs	Median age at death	55 yrs
Mode	65 yrs	Mode	55 yrs
Age range at diagnosis	11-96 yrs	Age range at death	23-93 yrs
SD age-adjusted incidence rate	13.1	SD age-adjusted death rate	2.0
US SEER age-adjusted incidence rate (2004)	19.6 *	US SEER age-adjusted death rate (2004)	2.7 *

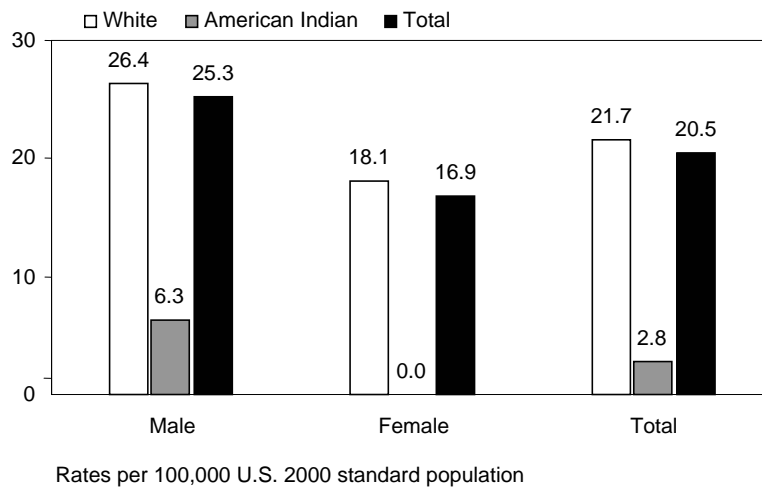
Rates per 100,000 U.S. 2000 standard population – * 2005 US SEER age-adjusted rates not available

The circle graph at the right displays the SEER Summary Stage at diagnosis for melanoma of the skin cases reported in South Dakota in 2005. If detected early and treated properly, melanoma is highly curable. However, melanoma is more likely than other skin cancer to spread to other parts of the body.



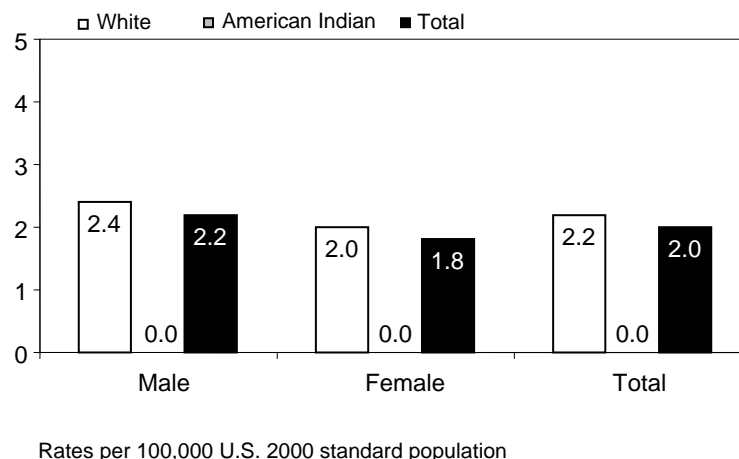
See below for the age-adjusted melanoma of the skin incidence rate for 2005 by race and gender for South Dakotans. Melanoma is primarily a disease of whites. As shown, the rate for the white population is significantly higher than for American Indians.

Age-adjusted Melanoma of the Skin Incidence Rate, South Dakota, 2005



Melanoma accounts for about 3% of skin cancer cases, but it causes more than 75% of skin cancer deaths. Cancer is the second leading cause of all deaths in South Dakota. Melanoma of the skin is the number-one cause of cancer death in women age 25 to 30. It can affect young, otherwise healthy people. The South Dakota age-adjusted death rates for melanoma by race and gender for 2005 are shown below.

Age-adjusted Melanoma of the Skin Mortality Rate, South Dakota, 2005



Detection

Be alert and recognize new or changing skin growths. Suspicious lesions or progressive changes should be evaluated promptly by a physician. The simple **ABCD guideline** below helps identify warning signals of the most common, but not all types of melanoma.

- **A**symmetry – One half of the abnormal area is different from the other half;
- **B**orders – The lesion or growth has irregular edges;

- **C**olor – Color changes from one area to another, with shades of tan, brown, or black (sometimes white, red, or blue). A mixture of colors may appear within one lesion;
- **D**iameter – The trouble spot is usually (but not always) larger than 6 mm in diameter or about the size of a pencil eraser.

View the complete melanoma monograph published by the South Dakota Department of Health at <http://doh.sd.gov/SDCR/PDF/Melanomaofskin.pdf>. For additional information, please contact Kay Dosch, Cancer Registry Coordinator, at 605-773-6345 or 800-592-1861.

South Dakota influenza surveillance: 2007-2008 season

*By Vickie Horan, Bioterrorism Surveillance Coordinator, Department of Health
Dr. Lon Kightlinger, MSPH, PhD, State Epidemiologist, Department of Health*

Summary

The 2007-08 influenza season was of moderate severity and 26 week duration. A total of 684 laboratory confirmed influenza cases, 394 influenza A and 290 influenza B, were reported to the South Dakota Department of Health (SD DOH) from the beginning of the influenza season starting October 6th, 2007 through season's end on May 17th, 2008. The peak of the influenza season occurred during the 3rd week of February, MMWR Week 8 ending February 23rd. There were 361 influenza hospitalizations and 22 influenza deaths reported for the season.

Background

The Centers for Disease Control and Prevention (CDC) guidelines for the 2007-08 season were published in the *Prevention and Control of Influenza* MMWR on June 29th, 2007, Vol. 56, <http://www.cdc.gov/flu/professionals/acip/index.htm>

Approximately 132 million doses of influenza vaccine were produced for the 2007-08 U.S. influenza season. The doses were produced by four companies: Sanofi Pasteur, MedImmune Vaccines, Novartis CSL Biotherapies, and GlaxoSmithKline. The trivalent vaccine included A/Solomon Islands/3/2006 (H1N1)-like, A/Wisconsin/67/2005 (H3N2)-like, and B/Malaysia/2506/2004-like antigens.

The SD DOH distributed a total of 123,530 doses of influenza vaccine. Of these 31,770 doses for Community Health Services field offices and 44,040 doses for clinics participating in the Vaccines For Children program. In addition, SD DOH promoted the influenza prevention campaign “*Stop it . . . Don't spread it*” by distributing posters in newspapers and to healthcare and childcare facilities.

Results from the 2007 Behavioral Risk Factor Surveillance System (BRFSS) showed South Dakota ranking 6th in the nation with 77.4% of individuals aged ≥ 65 years receiving influenza vaccination. The survey also showed the state ranking 38th in pneumococcal vaccination coverage with 63.7% of individuals in that age group receiving vaccine.

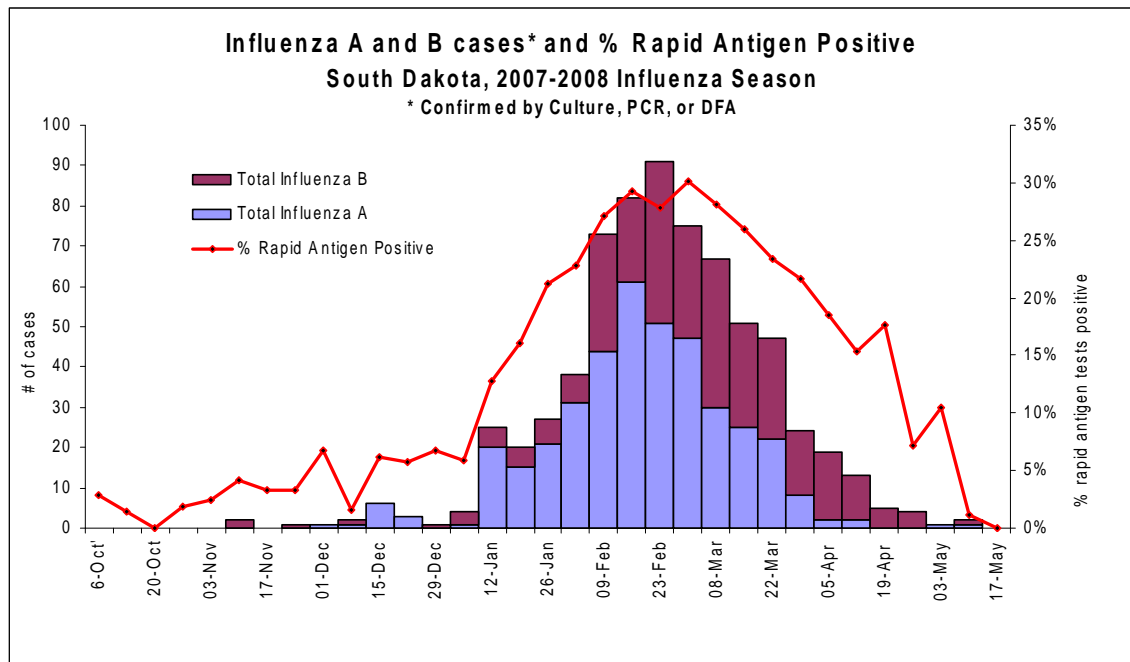
Epidemiology and Laboratory Surveillance

The SD DOH and SD Public Health Laboratory (SDPHL) conduct surveillance for influenza year-round, and intensifies activities October through May. The components of South Dakota's influenza surveillance program for the 2007-08 season included 30 sentinel sites; five Sentinel Provider Network physicians; SDPHL culture and PCR testing; Pine Ridge, Rapid City Regional, and Sanford Laboratories DFA testing; reporting of aggregate rapid antigen results;

confirmed influenza, influenza hospitalizations and deaths, and institutional outbreaks. During the influenza season, weekly summary reports are posted on the SD DOH website at: www.flu.sd.gov.

South Dakota's first confirmed case of influenza was identified during MMWR Week 45, ending November 10th, 2007 (Figure 1). The case, a 23 month-old male from Todd County, was positive for influenza B by PCR and culture at the SDPHL.

Figure 1



Source: SD Department of Health, Office of Disease Prevention

Following the first positive detection, influenza activity remained low until mid January. Activity then steadily increased in both percentage of positive rapid antigen tests and laboratory confirmed cases until the peak was reached during the third full week of February, MMWR Week 8, ending February 23rd.

A total of 684 confirmed influenza cases, 394 (58%) influenza A and 290 (42%) influenza B, were reported to SD DOH. Of 394 influenza A isolates, 39 (10%) sub typed as A/H1, 105 (27%) sub typed as A/H3, and 250 (63%) were not sub typed. Of the 21 influenza B isolates identified, 1 (1%) were sub typed as B/Malaysia, 20 (7%) as B/Shanghai, and 269 (92%) were not sub typed.

Other viral respiratory pathogen reports included 82 adenovirus, 147 parainfluenza - 1, 25 parainfluenza - 2, 157 parainfluenza - 3, 54 parainfluenza - 4, and 504 respiratory syncytial virus (RSV).

The median age of confirmed influenza cases (Table 1) was 23 years of age with an age range of 20 days to 99 years. There were 310 (45%) cases < 19 years old and 271 (40 %) were 19-64 years old. Individuals >65 years of age accounted for only 104 (15%) of influenza cases.

There were 361 individuals reported hospitalized during the 2007-08 influenza season (Table 1). Influenza-associated hospitalizations became officially reportable on December 25th, 2006. Prior to that, SD DOH requested hospitals, clinics, physicians, and nurses report those events

voluntarily. The first hospitalization (Figure 2) was identified during MMWR Week 40, ending October 6th. Hospitalizations peaked during week ending February 23rd when 47 patients were hospitalized for influenza

Table 1, Age Distribution of Reported Influenza Cases, South Dakota, 2007-2008 Influenza Season

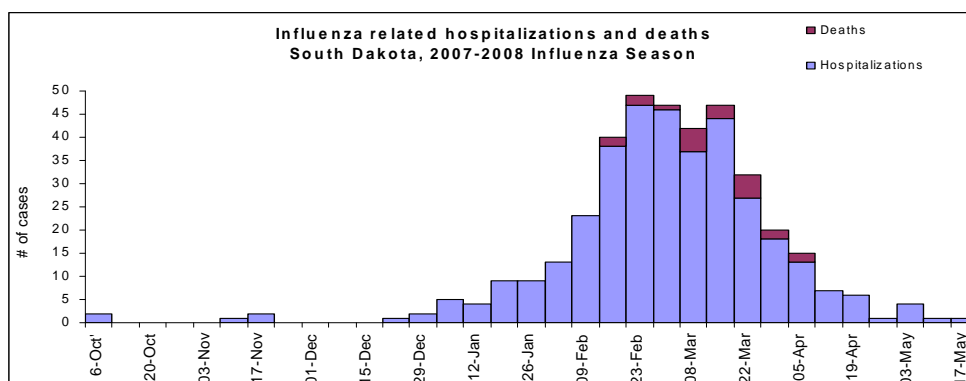
Lab Confirmed Influenza Cases (by DFA, PCR, or culture)			Influenza Associated Hospitalizations		Influenza Associated Deaths
Age Group	# Cases	%	# Hosp	%	# Deaths
0-9	249	36%	73	20%	
10-18	61	9%	4	1%	
19-29	78	11%	19	5%	
30-39	67	10%	23	6%	1
40-49	52	8%	13	4%	
50-59	50	7%	32	9%	3
60-69	36	5%	56	16%	3
70+	91	13%	141	39%	15
Total	684		361		22

Source: SD Department of Health, Office of Disease Prevention

For patients who were hospitalized with influenza, the age range was 5 days to 97 years with a median age of 64 years. Further age stratification revealed 20% of hospitalized cases were <10 years of age and 48% were >65 years of age.

Twenty-two individuals died due to influenza and its complications (Table 1/Figure 2) during the 2007-08 influenza season. Gender breakdown was 36% male and 64% female. The median age was 81, with an age range of 30 - 97 years.

Figure 2, Source: South Dakota Department of Health, Office of Disease Prevention



National Influenza Surveillance Data (Provisional data)

During the 2007-08 season, influenza A (H1), A (H3), and B viruses have co-circulated in the United States. Influenza A (H3) viruses have predominated during the season overall; however, the most commonly reported influenza virus has varied by week and by region. Nationally

220,666 respiratory specimens were tested for influenza with 39,453 (17.9 %) positive: 28,105 (71 %) were influenza A and 11,348 (29 %) were influenza B. Among the influenza A isolates sub typed, 26 % were influenza A/H1, 74 % were influenza A/H3, and 67 % were not typed. The full report is available at www.cdc.gov/flu/weekly/fluactivity.htm .

Interim results from a study carried out with the Marshfield Clinic in Wisconsin found vaccine effectiveness of 44%. Additional information on this study can be found at:

<http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5715a1.htm>

For the up-coming influenza season, *The Prevention and Control of Influenza, Recommendations of the Advisory Committee on Immunization Practices (ACIP), 2008* is posted on the following website:

http://www.cdc.gov/mmwr/preview/mmwrhtml/rr57e717a1.htm?s_cid=rr57e717a1_e?s_cid=ccu072108_influenza_e

The early release of this document was printed in the CDC Morbidity and Mortality Weekly Report, July, 17, 2008, Vol. 57 (<http://www.cdc.gov/mmwr/PDF/rr/rr57e717.pdf>). It is also reprinted in this Public Health Bulletin, beginning on page 8. The 2008-2009 trivalent vaccine virus strains are A/Brisbane/59/2007 (H1N1)-like, A/Brisbane/10/2007 (H3N2)-like, and B/Florida/6/2006-like antigens. All three strains are different from the 2007-2008 Northern Hemisphere influenza vaccine.

The antiviral medications recommended for chemoprophylaxis or treatment of influenza (oseltamivir or zanamivir) have not changed for the 2008-2009 influenza season.

South Dakota Department of Health - Infectious Disease Surveillance
Selected Morbidity Report, 1 January – 30 June 2008

(provisional numbers) see <http://doh.sd.gov/ID/site.aspx>

	Disease	2008 year- to-date	5-year median	Percent change
Vaccine-Preventable Diseases	Diphtheria	0	0	n/a
	Tetanus	0	0	n/a
	Pertussis	4	15	-73%
	Poliomyelitis	0	0	n/a
	Measles	0	0	n/a
	Mumps	0	0	n/a
	Rubella	0	0	n/a
	<i>Haemophilus influenza</i> type b	0	0	n/a
Sexually Transmitted Infections and Blood-borne Diseases	HIV infection	17	13	+31%
	Hepatitis B, acute	0	2	-200%
	Chlamydia	1397	1237	+13%
	Gonorrhea	128	129	-1%
	Syphilis, early	2	1	+100%
Tuberculosis	Tuberculosis	5	5	0%
Invasive Bacterial Diseases	<i>Neisseria meningitidis</i>	1	2	-50%
	Invasive Group A <i>Streptococcus</i>	14	8	+75%
Enteric Diseases	<i>E. coli</i> , Shiga toxin-producing	16	12	+33%
	Campylobacteriosis	120	99	+21%
	Salmonellosis	58	60	-3%
	Shigellosis	75	16	+369%
	Giardiasis	31	32	-3%
	Cryptosporidiosis	22	20	+10%
	Hepatitis A	2	1	+100%
Vector-borne Diseases	Animal Rabies	7	49	-86%
	Tularemia	2	4	-50%
	Rocky Mountain Spotted Fever	1	2	-50%
	Malaria (imported)	0	0	0%
	Hantavirus Pulmonary Syndrome	0	1	-100%
	Lyme disease	1	0	+100%
	West Nile Virus disease	1	2	-50%
Other Diseases	Legionellosis	1	1	0%
	<i>Streptococcus pneumoniae</i> , drug-resistant	3	3	0%
	Additionally, the following were reported: Chicken Pox (20); Cyclosporiasis (1); Group B <i>Strep</i> , invasive (9); Hepatitis B, chronic (13); Hepatitis C, chronic (133); Hepatitis E (1); MRSA, invasive (36); Typhus Fever (1); Q-Fever (1)			

Communicable diseases are obligatorily reportable by physicians, hospitals, laboratories, and institutions. The **Reportable Diseases List** is found at <http://doh.sd.gov/Disease/report.aspx> or upon request. Diseases are reportable by telephone, mail, fax, website or courier. **Telephones:** 24 hour answering device 1-800-592-1804; for a live person at any time call 1-800-592-1861; after hours emergency 605-280-4810. **Fax:** 605-773-5509. **Mail** in a sealed envelope addressed to the DOH, Office of Disease Prevention, 615 E. 4th Street, Pierre, SD 57501, marked "Confidential Medical Report". **Secure website:** www.state.sd.us/doh/diseasereport.htm.

2,900 copies of this Bulletin were printed by the Department of Health at a cost of \$0.00 per copy.